August 5, 1985

David Sheridan
Sheridan Catheter Corporation
Route 40
Argyle, New York 12809

Dear Mr. Sheridan:

For several reasons it appears wise to update the instructions for use of the Argyle-Dennis Gastrointestinal Sump Tube.

The first of these changes derives from the fact that glass 10 ml. syringes are no longer available in most hospitals and that the available plastic syringes offer so much resistance to motion of the plunger that they cannot be used to detect duodenal peristalsis.

A second factor derives from difficulty passing the tip of the tube downward into the oro-pharynx. I have found that if one heats the tip of the tube in boiling water and bends it so that it holds a 30 degree angle and inserts the tube so that this points downward, then this passage is regularly very easily accomplished.

A third factor is that we now have regularly available excellent anesthetics that can be sprayed into the nose so that passage can be without discomfort to the patient.

Use of a standard intravenous extension tube as a water manometer serves as an excellent detector of the presence of peristalsis as the tube passes into the duodenum.

On a separate sheet I enclose the proposed instructions.

I have several questions to pose to you:

(1) Would it be feasible to manufacture the tube with the 30 degree angulation at the tip? This angulation usually is imposed upon the tube approximately at the distal margin of the rubber of the balloon.

(2) It has not been my own experience that the line to the balloon has become plugged with the balloon inflated, but it has been reported to me by others. It seems to me that when the tube first came out one could cause the balloon to rupture by simply putting mineral oil down through the suction line of the tube. This does not seem to cause the balloon to rupture in recently purchased tubes. Has the composition of the rubber balloon been changed so that it is impervious to mineral oil? There is a real safety factor in having the balloon susceptible to deterioration upon the demand.
Would it be feasible to include in the package a rubber balloon capable of holding a liter of air with an adaptor at the mouth of it which could be plugged into the suction line of the balloon for the purpose of inflating the stomach?

Would it be feasible also to include in the package a water manometer such as might be made of a two-foot piece of intravenous tubing? This should have an adaptor at one end that would fit the balloon-line connector.

Threading the tube through small intestine results in some accordioning of the bowel, especially if this is being done over one introduced by the nasogastric rather than the jejunostomy route. Would it be feasible to make the total length ten feet instead of the present 7½ feet?

The tube has been invaluable in several patients in the last two years in whom recurrent intestinal obstruction has redeveloped quickly after operation for intestinal obstruction. In such cases it has been passed into the jejunum through a stab wound in the left upper quadrant passing through the wall of the jejunum in a Witzel pattern. The tube then has been passed the full length of the small intestine to the ileocecal junction. The intestines have then been returned to the abdomen in a carefully layered fashion. The tube has consistently proven to be stiff enough so that when more adhesions occur (if they do) they at least are not imposing such areas of angulation as to produce recurrent obstruction. The tube is left in place for two weeks or more, thus providing excellent post-operative maintenance of decompression without the discomfort of having to have prolonged nasogastric intubation.

I am toying with the thought of writing a further article on utilization of the tube and am very pleased to find that others are finding it as satisfactory as it has proven to be in my own hands. I have recently had inquiries about utilization of the tube from as far away as India.

I would be very pleased to hear from you about your thoughts on these matters.

Very sincerely yours,

Clarence Dennis, M.D.
Professor of Surgery

CD/cf
Enclosure